Agriculture, Food, Natural Resources Career Cluster
Resource List

Resource	Author / Publisher	Location	Notes
Alternative Energy	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Animal Health Care	Infovets.com – Animal Heath Publishers	http://www.infovets.com/styles/?page=home%2Ehtm	A series of **animal health** manuals and on-line resources written by veterinarians for dog, cat, and horse owners, as well as beef and cattle ranchers, and dairy producers
Carnivore Gross Anatomy	University of Minnesota – College of Veterinary Medicine	http://vanat.cvm.umn.edu	This is an excellent website that provides online self-test, including muscle systems and links to other online resources from other veterinary colleges. Information is at a high level of complexity, but broken down into smaller segments for secondary understanding.
Dog Owner Regulations and Laws	American Kennel Club	http://www.akc.org/dogowner/government_relations/index.cfm	Can be used to meet standards 6, 7, 12, and 13 in Small Animal Science
Emerging Technologies in Agriculture	National FFA Organization	http://www.magnetmail.net/Actions/email_web_version.cfm?publish=newsletter&user_id=NSTA&message_id=3122560	This resource can be used to support the Middle School course Introduction to Agricultural Science and Agriscience course standards. This resource outlines lab activities and recommends video clips. AFRN teachers may need to gain access by using their AgCN login.

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Energy Alternatives	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Energy Alternatives	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Esri Education Community	Esri	http://edcommunity.esri.com	This website provides educational resources to teachers use GIS technology in their classroom by providing: Case studies to help guide instruction and research projects; GeoMentors to help teachers and students use GIS; and sample GIS career videos.
Extension Publications	University of Tennessee	https://utextension.tennessee.edu/publications/Pages/default.aspx	Links to research publications, industry certifications, and best practices related to all AFRN programs of study.
FFA Learn Resources	National FFA Organization	https://www.ffa.org/FFAResources/ffalearn/Pages/default.aspx	FFA Learn has lesson plans and other resource materials grouped by topic and by career cluster area. These resources cover many subjects including Risk Management, Service Learning, Agri-Entrepreneurship and much more

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Field Crops	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS
Freebies for Science Teachers	National Science Teachers Association	www.nsta.org/publications/freebies.aspx	Free resources for the K-12 classroom. This site includes resources for each program of study
GeoTech Resources	National GeoTech Center of Excellence	www.geotechcenter.org/Resources/Resource-Center	Geographic Information Science (GIS) geospatial technology teaching resources such as best practices, data sources, technology, textbooks, curriculum, organizations, case studies, and career pathways. These resources can be used to meet standards in Introduction to Geographic Information Sciences (GIS) course.
GIS Ag Maps	Applied GIS and Remote Sensing: Information, Data, and Analysis	http://www.gisagmaps.com	Show and provides information and data in order that GIS and remote sensing. Free downloadable GIS software. Can be used with Agricultural and Biosystems Engineering Standards 6, 7, and 9: Agricultural Power and Equipment Standards 13 and 18; Principles of Agricultural Mechanics Standard 9; and Natural Resource Management standards 21 and 22.
GIS Best Practices by US Department of Agriculture	Esri	http://www.esri.com/library/bestpractices/agriculture.pdf	GIS Best Practices by the US Department of Agriculture. Several of these practices could be replicated on a local, regional or state level as an instructional activity or as student projects. This is a great resource to help introduce GIS technology within several POS.

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GIS Related Lessons	ARC Lessons - Esri	http://edcommunity.esri.com/Resources/ArcLessons	Online Library of GIS-related lessons at various levels using various software.
GIS Software and Materials	Esri	http://www.esri.com/software/arcgis/explorer	Shows and provides information and data in order that GIS and remote sensing. Can be used with Agricultural and Biosystems Engineering Standards 6, 7, and 9: Agricultural Power and Equipment Standards 13 and 18; Principles of Agricultural Mechanics Standard 9; and Natural Resource Management standards 21 and 22.
Greenhouse Plant Information	Electronic Grower Resource Online	www.e-gro.org/alert.php	E-Grow newsletter is to inform greenhouse growers know of insect, disease, nutritional, or physiological growth situations that are occurring in production greenhouses. Articles are searchable. Will help students to become proficient in Principles of Plant Science and Hydroculture standards 12 and 13, Greenhouse Management standards 3, 11, 12, 13, 14, 22, 23, 24 and 25
Horticulture	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.

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Imagine (X-ray) Anatomy	University of Illinois – College of Veterinary Medicine	http://vetmed.illinois.edu/courses/imaging_anatomy	The Imaging Anatomy web site has basic and normal imaging (X-Ray) anatomy of domestic animals. Students will need to have a solid understanding of canine, feline, equine and bovine anatomy. Site provides information that can be used in the Animal and Veterinary Science Program of Study
Informational resource link for all POS	About.com	www.about.com	**About.com** is a valuable resource for content that helps people to solve the large and small needs of everyday life.
Introduction to Using GIS in the Classroom	Esri	http://training.esri.com/gateway/index.cfm?fa=catalog.webCourseDetail&courseid=2198	If you have not completed a GIS training session, it is highly recommend to complete this three hour course prior to teaching any GIS standard. You will need to use the free downloadable ArcGIS Online Map Viewer program for this course. Information is provided on the web site.
Labor and Employment Data	O Net online	http://www.onetonline.org	This site has current and projected labor data and job skills aligned to career cluster This site can help with all labor, skills and employment trend standards for all programs of study. Students will need some basic navigation steps.
Labor and Employment Data	US Bureau of Labor and Statics	www.bls.gov	This site has current and projected labor data and job skills aligned to career cluster This site can help with all labor, skills and employment trend standards for all programs of study. Students will need to now some of the basic employment terminology to navigate using this site.

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Livestock and Pasture	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Local Food Systems	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Market, Business & Risk Management	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
National Geographic Education Collections	National Geographic	http://education.nationalgeographic.com/education/topics/pollution/?ar_a=1&audiences=1	This resource contains lesson plans, video and other materials for Grades 9-12 on animals, climate change, ecosystems, energy and geography topics
Organic Farming	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.

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Plant taxonomy and Characteristics	Flora of North America	http://floranorthamerica.org	Flora of North America is a reference source, information on the names, taxonomic relationships, continent-wide distributions, and morphological characteristics of all plants native and naturalized found in North America north of Mexico. Text is technical and knowledge of terminology is needed.
Science Based Research Summaries	Science Daily	www.sciencedaily.com	This is a great resource for science based information including but not limited research summaries from universities, and other scientific and professional organizations. Use this resource with any AFNR course. Mobil Apps are available.
Soil and Compost	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.
Stem Classroom Archive	National Science Teachers Association	www.nsta.org/publications/archive-stem.aspx	Forum for ideas, journal articles and resources for all AFRN Programs of Study
STEM In Agriculture	The STEM Classroom	http://www.magnetmail.net/Actions/email_web_version.cfm?publish=newsletter&user_id=NSTA&message_id=3122560	Articles are at multiple levels of complexity, but offers online publications, news, sustainable and organic farming practices, alternative crop and livestock, and innovative marketing. Site also provides links for credible sources for each AFNR POS

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Sustainable Agriculture Information	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, sustainable and organic farming practices, alternative crop and livestock, and innovative marketing. Site also provides links for credible sources for each AFNR POS.
Technology: Aquaponics	The Ciese Collaborative Project	http://www.ciese.org/curriculum/aquaponics/lp_production.html	This resource provides technical information for set up, design and activities related to aquaponics. The text has multiple levels of complexity, but broken down into smaller segments for secondary understanding. This reference can be used with Principles of Plant Science and Hydroculture standards 18-22; Landscaping and Turf Science standards 15, 20, Greenhouse Management standards 26-27.
TennesseeAg.org	FACCT (Farm Animal Care Coalition of Tennessee	http://www.tennesseeag.org	TennesseeAg.org provides general Tennessee agricultural facts with resource and media links. Materials are at multiple levels of complexity to help the student to become proficient in the following: Introduction to Agricultural Science Grade 7 & 8 standard 1, Agriscience standard 1, Principles of Agribusiness standards 1, 4, Principles of Food Production standard 1 SAE (for Credit) standards 3, 10, and Passing Literacy OnWard (PLOW) program.

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TWRA On the Go App	Tennessee Wildlife Resources Agency	http://www.tnwildlife.org	The TWRA has gone native! Now sportsmen and outdoor enthusiasts have a guide to the great Tennessee outdoors right at their fingertips with a FREE new native mobile app available for Apple (iOS 6.0 and newer) and Android devices (Android OS 3.0 and newer).
US Farm Bill and Federal Legislation	United States Department of Agriculture	www.usda.gov/farmbill	Articles are at a high level of complexity, but archives can be accessed online and searched by topic to find informational texts on a variety of topics.
Vet Tech and Vet Assistant Certification Program	Animal Care Technology	www.4act.com/training	This site provides educational videos, materials and testing for several industry certifications within the veterinary industry. There is a fee for this online service.
Veterinary Career and Rabies Identification and Prevention	The American Veterinary Medical Association, with a kind contribution from GlaxoSmithKline	http://avma.ait.net	Instructional DVDs to educators/mentors of students interested in the veterinary field. If you would like to order a free copy for classroom use, visit the website.
Veterinary Technician News	National Association of Veterinary Technicians in America	http://www.navta.net	Provides links to credible articles, case studies and online training materials including videos that can be used with Small and Large Animal Science and the veterinary Science courses. Articles and case studies are at a high level of complexity, but achievable with some scaffolding.

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Water Management	National Center for Appropriate Technology (NCAT) / National Sustainable Agriculture Information Service	https://attra.ncat.org	Articles are at multiple levels of complexity, but offers online publications, news, and video clips. Site also provides links for credible sources for each AFNR POS.